

REMARKS

THE AMENDMENTS

Applicants cancel claims 43 through 60 (previously misnumbered claims 19 through 37). Claim amendments are to expedite prosecution of the application. Claim amendments add no new subject matter, and are fully supported throughout the specification and by the drawings and claims as filed. Support and reasoning for the amendments are provided below.

Support for Claim Amendments and Reasons for Amendments

These amendments are made to clarify the claims and to expedite allowance of the present application.

New Claim 61 includes the phrase “wherein said multiple force chip comprises multiple functional elements in different layers.” New claim 73 includes the phrase “wherein at least one of said two or more chips is a multiple force chip comprising multiple functional elements in different layers.” Support for these phrases can be found throughout the application as filed, for example, on page 15:

A “chip” is a surface on which at least one manipulation or process, such as a translocation, separation, capture, isolation, focusing, enrichment, concentration, physical disruption, mixing, binding, or assay can be performed. A chip can be a solid or semi-solid substrate, porous or non-porous on which certain processes, such as physical, chemical, biological, biophysical or biochemical processes, etc., can be carried out. A chip that performs more than one function can have combinations of one or more different functional elements such specific binding members, substrates, reagents, or different types of micro-scale structures that provide sources of different physical forces used in the processes carried out on the chip. Chips can be multiple force chips, in which different functional elements can be provided on the same surface, or in different structurally linked substrates or layers (where a layer is a surface that supports substrates, micro-scale structures, or moieties to be manipulated) that are vertically oriented with respect to one another. For descriptions of multiple force chips, see United States Application Number 09/679,024 having attorney docket number 471842000400, entitled “Apparatuses Containing Multiple Active Force Generating Elements and Uses Thereof” filed October 4, 2000, herein incorporated by reference in its entirety. (Emphasis added).

New claim 62 incorporates the phrase "wherein said multiple force chip comprises at least one acoustic element" from cancelled claim 44 (previously misnumbered claim 20).

CLAIMS ARE DEFINITE UNDER 35USC §112, SECOND PARAGRAPH

The Examiner alleges that claims 19 through 30 are indefinite under 35 USC §112, Second Paragraph for being unclear as to how a "biochip system" recited in the preamble can have just one chip. The Examiner also alleges that in claim 30, it is unclear how one chip can comprises one or more than one chip.

Applicants have amended claim 30 to clarify the claimed invention rendering this rejection moot. Applicants do not understand the rejection with respect to the phrase "biochip system." Applicants respectfully disagree with the Examiner and submit that the claims are clear and definite under 35 USC §112, Second Paragraph as presently written. Support for the phrase "biochip system" can be found throughout the application as filed, for example, on page 13, lines 18-21:

An "integrated chip system", "integrated chip system", a "system of integrated chips", a "system of integrated biochips" or "system" is at least one chip that can perform at least two sequential tasks in the processing and analysis of a sample, in which at least one task performed by the integrated biochip system is a processing task.

CLAIMS ARE NOVEL UNDER 35 USC §102(E)

1. The Examiner alleges that misnumbered claims 19, 20, 22, 24 through 29 are anticipated by Anderson et al. (U.S. Patent No. 6,168,948). Applicants disagree that Anderson et al. discloses an integrated biochip system for sample preparation or analysis, comprising one or more chips, wherein at least one of said one or more chips is a multiple force chip, wherein said multiple force chip comprises at least one acoustic element; further wherein said integrated biochip system can perform two or more sequential tasks, wherein at least one of said two or more sequential tasks is a processing task.

However, to expedite allowance of claims, Applicants have cancelled claims 43 through 60 (previously misnumbered claim 19 through 36) and have added new claims 61 through 77, with the independent claims 61 and 73 to include a multiple force chip comprising "multiple functional elements in different layers."

Applicants have cancelled all previous claims and have added new claims 61 through 77 that are novel under 35 USC §102. Applicants therefore respectfully request that the rejection be removed.

2. The Examiner alleges that misnumbered claims 19, 22, 24 through 36 are anticipated by Christel et al. (U.S. Patent No. 6,363,871). Applicants disagree that Christel et al. discloses an integrated biochip system for sample preparation or analysis, comprising one or more chips, wherein at least one of said one or more chips is a multiple force chip, wherein said multiple force chip comprises at least one acoustic element; further wherein said integrated biochip system can perform two or more sequential tasks, wherein at least one of said two or more sequential tasks is a processing task.

However, to expedite allowance of claims, Applicants have cancelled claims 43 through 60 (previously misnumbered claim 19 through 36) and have added new claims 61 through 77, with the independent claims 61 and 73 to include a multiple force chip comprising "multiple functional elements in different layers."

Applicants have cancelled all previous claims and have added new claims 61 through 77 that are novel under 35 USC §102. Applicants therefore respectfully request that the rejection be removed.

CLAIMS ARE NONOBVIOUS UNDER 35USC §103(A)


The Examiner alleges that misnumbered claim 23 is unpatentable due to obviousness over Anderson et al. (U.S. Patent No. 6,168,948) in view of Parton et al. (U.S. Patent No. 5,653,859). Applicants disagree that Anderson et al. discloses the invention substantially as claimed. However, to expedite allowance of claims, Applicants have cancelled claims 43 through 60 (previously misnumbered claim 19 through 36) and have added new claims 61 through 77, with the independent claims 61 and 73 to include

a multiple force chip comprising "multiple functional elements in different layers." Neither Anderson et al. nor Parton et al. disclose, suggest, or provide motivation for a multiple force chip comprising "multiple functional elements in different layers." Thus, new claims 61 through 77 are nonobvious over the disclosure of Anderson et al. in view of Parton et al., and Applicants therefore respectfully request that the rejection be removed.

Applicants submit that the claims are ready for examination and in condition for allowance.

Respectfully submitted,

Date: April 20, 2005


David R. Preston
Reg. No. 38,710

David R. Preston & Associates, A.P.C.
12625 High Bluff Dr.
Suite 205
San Diego, CA 92130
Telephone: 858.724.0375
Facsimile: 858.724.0384

Attorney Docket No. ART-00105.P.1.1-US

In the event this paper is deemed not timely filed the applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 501,321 along with any other additional fees which may be required with respect to this paper; any overpayment should be credited to the account. If any fees charged to this account will exceed \$500, applicants respectfully requests that its counsel be notified of such amounts before the Deposit Account is charged.